Prostatitis

A New Era in Prostatitis Research Begins

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[Rev Urol. 2000;2(1):16-18]

he summer of 1999 witnessed the publication of three papers that will not only change the course but also stimulate research in the field of chronic prostatitis. Since the publication of the historic papers describing the classic lower urinary tract culture technique¹ and the traditional classification system² 2 or 3 decades ago, the field of prostatitis research and clinical management has been essentially stagnant. A new classification system, a validated symptom assessment tool, and a general consensus on the direction of prostatitis research will regalvanize the members of the urologic community into reassessing their approach to this enigmatic syndrome.

References

- Meares EM, Stamey TA. Bacteriologic localization patterns in bacterial prostatitis and urethritis. *Invest Urol.* 1968;5:492-518.
- Drach GW, Fair WR, Meares EM, et al. Classification of benign diseases associated with prostatic pain: prostatitis or prostatodynia? J Urol. 1978;120:266.

NIH Consensus Definition and Classification of Prostatitis

Krieger JN, Nyberg L, Nickel JC. *JAMA*. 1999;282:236-237.

In 1995, the NIH convened the National Workshop on Chronic Prostatitis to establish a new definition and classification of prostatitis syndromes. The NIH consensus classification includes the following four categories:

Category I: Acute bacterial prostatitis Category II: Chronic bacterial prostatitis

Category III: Chronic pelvic pain syndrome (CPPS)

A. Inflammatory

B. Noninflammatory

Category IV: Asymptomatic inflammatory prostatitis Patients in category I have an acute bacterial infection of the prostate gland. Those in category II have a history of recurrent urinary tract infections secondary to a chronic infection of the prostate gland. Patients in category III have chronic pelvic pain but have had no uropathogenic bacteria cultured employing standard microbiologic techniques. Those with the inflammatory subtype (category IIIA) of the condition have excessive leukocytes localized to prostate-specific specimens, while those with the noninflammatory type (category IIIB) do not have significant leukocytosis in the prostate-specific specimens. Patients included in category IV have no history of genitourinary pain complaints, but leukocytosis or bacteria have been noted during evaluation for other conditions.

The important changes in this classification system, compared with the traditional system, are the recognitions that our understanding of the etiology of CPPS symptoms in most patients is limited and that organs other than the prostate gland may be involved. Asymptomatic prostatitis may have important—as yet, unknown—ramifications in benign prostatic hyperplasia (BPH), prostate cancer, or infertility.

This new working definition and classification system, if universally adopted, will result in improved approaches to our clinical diagnosis and patient treatment for chronic prostatitis.

The National Institutes of Health Chronic Prostatitis Symptom Index (NIH-CPSI): Development and Validation of a New Outcome Measure

Litwin SM, McNaughton-Collins M, Fowler FJ, et al. J Urol. 1999;162:369-375.

Chronic prostatitis is poorly understood, often inadequately treated, and extremely bothersome to patients with this diagnosis. It is one of the most common diseases diagnosed by urologists in clinical practice. To improve understanding of this disease, the National Institute of Diabetes and

Digestive and Kidney Diseases funded the NIH Chronic Prostatitis Collaborative Research Network, a multi-institutional endeavor whose purpose was to define the disease and its etiology, describe its natural history, develop validated outcomes measures, and determine better methods of treatment and prevention. The first step in accomplishing this agenda was to develop a reliable and valid index of symptoms and quality-of-life impact.

The investigators employed a structured literature review of previous work to provide a foundation for the new instrument. Following a series of focus group assessments, expert panel review, and cognitive testing, a 21-item draft underwent formal validation testing in patients with prostatitis, patients with BPH, and a control group. Based on this extensive validation testing, a chronic prostatitis symptom index (NIH-CPSI) was finalized.

The index is composed of nine items that address three different but important domains of the chronic prostatitis experience (Figure, page 18). The primary component is pain, which is determined with four questions focused on location, severity, and frequency. Urinary function (irritative and obstructive) is ascertained with two questions. Quality-of-life impact is established with three questions about the effect of symptoms on daily activities. All information but that regarding urinary symptoms discriminates well between men with and without chronic prostatitis.

The NIH-CPSI provides a valid outcomes measure for symptoms in men with chronic prostatitis. While it cannot be used as a diagnostic aid, it will prove very useful, in both research studies and clinical practice, in initially assessing patients, subsequently following their progress, and providing specific treatment.

Research Guidelines for Chronic Prostatitis: A **Consensus Report from the First National** Institutes of Health International Prostatitis Collaborative Network (NIH-IPCN)

Nickel JC, Nyberg L, Hennennfent M. Urology. 1999;54:229-233.

The management of chronic prostatitis syndromes is poor. It is generally recognized that the confusion surrounding the diagnostic and treatment strategies in this disease is related directly to the lack of uniformity in the definition, entry criteria, classification system, and outcomes measures in the many small, short, poorly designed prostatitis studies available in the literature. The NIH organized the First International Prostatitis Collaborative Network (NIH-IPCN) workshop to address this problem. A panel of North American and international urologic researchers, interested physicians, medical industry representatives, and patients was invited to participate and review current definitions, classification systems, and recent epidemiologic and treatment studies.

A general consensus was developed to adopt the following criteria (all reviewed above) for clinical studies in chronic prostatitis/chronic pelvic pain syndrome:

- 1. The NIH definition of chronic prostatitis/chronic pelvic pain syndrome
- 2. The NIH classification system
- 3. The NIH-CPSI

It was agreed that standardization of definitions, classification systems, and outcomes parameters will promote rational and comparative evaluation of diagnostic and therapeutic strategies.

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> BOB DJAVAN, MD, PHD MICHAEL MARBERGER, MD

NIH Chronic Prostatitis Symptom Index (NIH-CPSI) *

Pain or Discomfort			6. How often have you had to urinate again less than 2
1. In the last week, have you experienced any pain or			hours after you finished urinating, over the last week?
discomfort in the following areas?	Yes	No	\square 0 Not at all
a. Area between rectum and testicles			\square 1 Less than 1 time in 5
(perineum)	\square_1	\square_0	\square 2 Less than half the time
b. Testicles	\square_1		\square ₃ About half the time
c. Tip of the penis (not related to			\square 4 More than half the time
urination)	-	· ·	☐ ₅ Almost always
d. Below your waist, in your	\square_1	\Box_0	· · ·
pubic or bladder area	•	· ·	Impact of Symptoms
•			7. How much have your symptoms kept you from doing
2. In the last week, have you experienced:	Yes	No	the kinds of things you would usually do, over the last week?
a. Pain or burning during urination?		\square_0	□ ₀ None
b. Pain or discomfort during or after		\Box_0	☐ 1 Only a little
sexual climax (ejaculation)?	- 1	— 0	☐ 2 Some
(.9 ,			\square_3 A lot
3. How often have you had pain or discomi	ort in a	ny of	_ 3
these areas over the last week?		<i>y</i>	8. How much did you think about your symptoms, over
□ 0 Never			the last week?
\square Rarely			□ 0 None
☐ 2 Sometimes			☐ 1 Only a little
☐ 3 Often			□ 2 Some
			\square_3 A lot
☐ 5 Always			<u> </u>
in 5 minus			Quality of Life
4. Which number best describes your AVERAGE pain or			9. If you were to spend the rest of your life with your
discomfort on the days that you had it, over the last week?			symptoms just the way they have been during the last
$\Box_1 \Box_2 \Box_3 \Box_4 \Box_5 \Box_6 \Box_7 \Box_8 \Box_9 \Box_{10}$			week, how would you feel about that?
NO PAIN PAIN AS BAD AS			□ 0 Delighted
YOU CAN IMAGINE			☐ 1 Pleased
100	O' II V II II K	anti.	☐ 2 Mostly satisfied
Urination			☐ 3 Mixed (about equally satisfied and dissatisfied)
5. How often have you had a sensation of not emptying			☐ 4 Mostly dissatisfied
your bladder completely after you finished urinating,			☐ 5 Unhappy
over the last week?			☐ 6 Terrible
\square 0 Not at all			in terrible
\square 1 Less than 1 time in 5			
\square_1 Less than 1 time in 3 \square_2 Less than half the time			Scoring the NIH Chronic Prostatitis Symptom
☐ 3 About half the time			Index Domains
\square 4 More than half the time			Pain: Total of items 1a, 1b, 1c, 1d, 2a, 2b, 3, and 4 =
\square_{5} Almost always			Urinary Symptoms: Total of items 5 and 6 =
in 5 Annost aiways			Quality-of-Life Impact: Total of items 7, 8, and 9 =
			φ uanty-of-life impact. Total of items i , o, and θ =

^{*}Adapted with permission from Litwin MS et al. $\it J$ $\it Urol.$ 1999;162:369-375.